UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/525,105	03/14/00	ABBOTT	D TI-28098

MM91/0328
GARY C HONEYCUTT
TEXAS INSTRUMENTS INCORPORATED
PO BOX 655474
MS 3999
DALLAS TX 75265

EXAMINER	
WILLIAMS,A	
ART UNIT	**PAPER NUMBER**
2826	

DATE MAILED: 03/28/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary	Application No. 09/525,105	Applicant(s) Abbott et al.
	Examiner Alexander Williams	Group Art Unit 2826

☒ Responsive to communication(s) filed on *Jan 16 2001*.

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire *3* month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) *1-22* is/are pending in the application.

Of the above, claim(s) *16-22* is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) *1-15* is/are rejected.

☐ Claim(s) _____ is/are objected to.

☒ Claims *1-22* are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐approved ☐disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____.

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

Serial Number: 09/525105 Attorney's Docket #: TI-28098

Filing Date: 3/14/00; claimed foreign priority to 3/19/99

Applicant: Abbott et al.

Examiner: Alexander Williams

Applicant's election of Group I (claims 1 to 16) in Paper # 3, filed 1/16/01, has been acknowledged. Claim 16 should be grouped with the method claims and therefore will not be examined at this time. Group I now consist of claims 1 to 15.

This application contains claims 16 to 22 drawn to an invention non-elected without traverse in Paper No. 3.

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claims 1 to 10 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, it is unclear and confusing to what is meant by "said gold layer providing a visual distinction to said area."

In claim 2, it is unclear and confusing to what is meant by "said gold providing a visual distinction to said area."

Any of claims 1 to 10 not specifically addressed above are rejected as being dependent on one or more of the claims which have been specifically objected to above.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CAR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the

examiner to consider the applicability of 35 U.S.C. 103© and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

Claim 1, **insofar as it can be understood**, is rejected under 35 U.S.C. § 102(b) as being anticipated by Tsuji et al. (U.S. Patent # 5,521,432).

For example, in claim 1, Tsuji et al. **(Figures 1 to 13)** specifically figure 9 show a leadframe **4-1** for use with integrated circuit chips **2** comprising: a plated layer **23** of gold selectively covering area of said leadframe intended for solder attachment; and said gold layer provided a visual distinction to said area.

Initially, and with respect to claims 2, 11 and 13, note that a "product by process" claim is directed to the product per se, no matter how actually made, In re Hirao, 190 USPQ 15 at 17 (footnote 3). See also In re Brown, 173 USPQ 685; In re Luck, 177 USPQ 523; In re Wertheim, 191 USPQ 90 (209 USPQ 554 does not deal with this issue); In re Fitzgerald, 205 USPQ 594, 596 (CCPA); In re Marosi et al., 218 USPQ 289 (CAFC); and most recently, In re Thorpe et al., 227 USPQ 964 (CAFC, 1985) all of which make it clear that it is the final product per se which must be determined in a "product by process" claim, and not the patentability of the process, and that, as here, an old or obvious product produced by a new method is not patentable as a product, whether claimed in "product by process" claims or not. Note that Applicant has burden of proof in such cases as the above case law makes clear.

Claims 2 to 9 and 11 to 15, **insofar as some of them can be understood**, are rejected under 35 U.S.C. § 103(a) as being unpatentable over Tsuji et al. (U.S. Patent # 5,521,432) in view of Kom et al. (U.S. Patent # 6,150,711).

In claim 2 and similar claim 11, Tsuji et al. **(Figures 1 to 13)** specifically figure 9 show a leadframe **4-1** for use with integrated circuit chips **2**, having a chip mount pad **3-1** and a plurality of lead segments **4-1**, comprising: a leadframe base **4-1** of copper or copper alloy. Tsuji et al. fails to explicitly show a first layer of nickel deposited on said copper; a layer of alloy of nickel and palladium on first nickel layer; a second nickel layer; a layer of palladium and a layer of gold. However, Tsuji et al. does show a layer on the leadframe.

Kom et al. is cited for showing a multi-layer plated lead frame. Specifically, Kom et al. **(figure 6)** discloses a leadframe base made of copper **61**; a first layer of nickel **62** deposited on said copper; a layer of alloy **63** of nickel and palladium on first nickel layer; a second nickel layer **64**; a layer of palladium **65**; and a layer of gold **62'** for the purpose of improving the structure of plating layers.

In claim 3 to 8, Note that the specification contains no disclosure of either the critical nature of the claimed dimensions or any unexpected results arising therefrom. Where patentability is said to be based upon particular chosen dimensions or upon another variable recited in a claim, the Applicant must show that the chosen dimensions are critical. In re Woodruff, 919 F.2d 1575, 1578, 16 USPQ2d 1934, 1936 (Fed. Cir. 1990).

As to claims 9 to 15, using the combination of Tsuji et al. and Kom et al., it would be obvious to one of ordinary skill in the art to use claimed detailed on the structure of the leadframe in the device.

Therefore, it would have been obvious to one of ordinary skill in the art to use Tsuji et al.'s leadframe pad and device to modify Kom et al.'s leadframe for the purpose of improving the structure of plating layers.

As to the grounds of rejection under section 103, see MPEP § 2113.

The listed references are cited as of interest to this application, but not applied at this time.

Field of Search	Date
U.S. Class and subclass: 257/666,675-678,690,692,693,696,698, 712,713,762,741,766-768,772,779,784,788	3/23/01
Other Documentation: foreign patents and literature in 257/666,675-678,690,692,693,696,698, 712,713,762,741,766-768,772,779,784,788	3/23/01
Electronic data base(s): U.S. Patents EAST	3/23/01

Papers related to this ***application may be submitted to Technology Center 2800 by facsimile transmission. Papers should be faxed to Technology Center 2800 via the Technology Center 2800 Fax center located in Crystal Plaza 4-5B15. The faxing of such***

papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The Technology Center 2800 Fax Center number is (703) 308-7722 or 24. Only Papers related to Technology Center 2800 APPLICATIONS SHOULD BE FAXED to the GROUP 2800 FAX CENTER.

Any inquiry concerning this communication or any earlier communication from the examiner should be directed to ***Examiner Alexander Williams*** whose telephone number is **(703) 308-4863.**

Any inquiry of a general nature or relating to the status of this application should be directed to the ***Technology Center 2800 receptionist*** whose telephone number is **(703) 308-0956.**

March 24, 2001

Primary Patent Examiner
Alexander O. Williams